AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

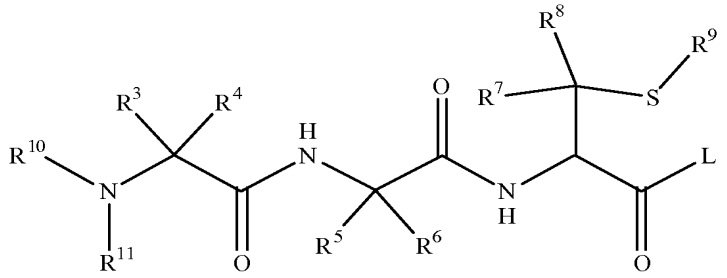
1-20. (canceled)

21. (previously presented) The amyloid-targeting imaging agent of claim 31, wherein A_{lab} includes a radionuclide selected from ^{99m}Tc, ^{99}Tc, ^{64}Cu, ^{67}Cu, ^{97}Ru, ^{109}Pd, ^{186}Re, ^{188}Re, ^{111}In, ^{113m}In, ^{153}Gd, ^{90}Y, ^{153}Sm, ^{166}Ho, ^{198}Au, ^{199}Au, ^{90}Sr, ^{89}Sr, ^{105}Rh, ^{201}Tl, ^{51}Cr, ^{67}Ga, ^{57}Co, ^{60}Co, ^{123}I, ^{125}I, ^{131}I or ^{18}F.

22. (previously presented) The amyloid-targeting imaging agent of claim 31, wherein A_{lab} includes a radionuclide selected from the group consisting of Tc and Re.

23. (previously presented) The amyloid-targeting imaging agent of claim 31, wherein A_{lab} is a metal chelate of a radioactive or paramagnetic metal ion.

24. (withdrawn) The amyloid-targeting imaging agent of claim 31, wherein A_{lab} comprises a chelating ligand of the formula



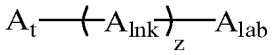
(VII)

where R^{10} is a linear or branched, saturated or unsaturated C_{1-4} alkylene group interrupted by one or two heteroatoms; R^{11} is H or R^{10}, or R^{10} and R^{11} taken together, form a 5- to 8-membered saturated or unsaturated heterocyclic ring optionally substituted with one or more of halogen, hydroxyl, amino, carboxyl, oxo, C_{1-4} alkyl, aryl, or C(O)R groups; R^3, R^4, R^5 and R^6 are independently H, carboxyl, C_{1-4} alkyl, an alpha carbon side chain of a D- or L-amino acid other than proline, or C(O)R; R^7 and R^8 are independently H,

carboxyl, amino, C_{1-4} alkyl, C_{1-4} alkyl; R^9 is H or a sulfur protecting group; and L is hydroxyl, alkoxy, an amino acid residue, or a linking group.

25-30. (canceled)

31. (currently amended) An amyloid-targeting imaging agent of the formula

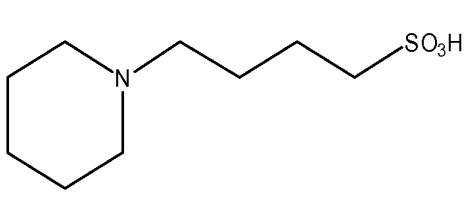


(I)

where z is 0 or 1; A_t is an amyloid targeting moiety selected from the group consisting of

~~$NaO_3SCH_2(CH_2)_4CH_2SO_3Na$,~~ ~~NaO3SNHCH2CH2CH2OSO3Na~~

$NaO_3SCH_2(CH_2)_4CH_2SO_3Na$, $NaO_3SNHCH_2CH_2CH_2OSO_3Na$,



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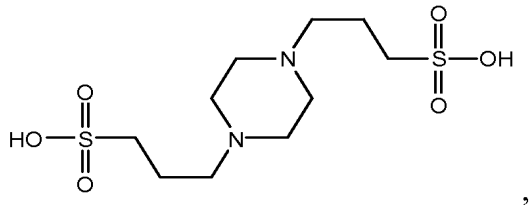

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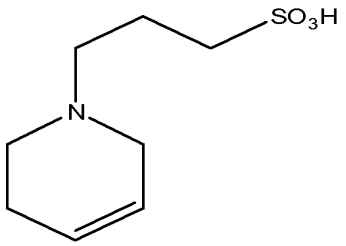

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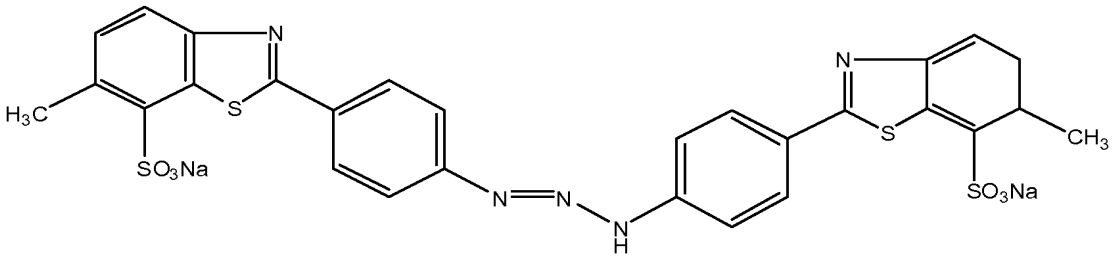

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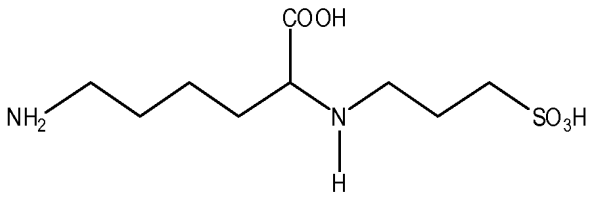

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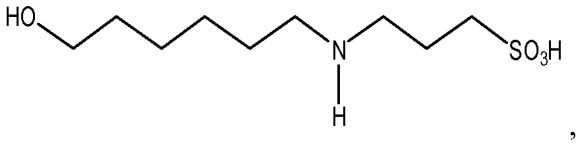

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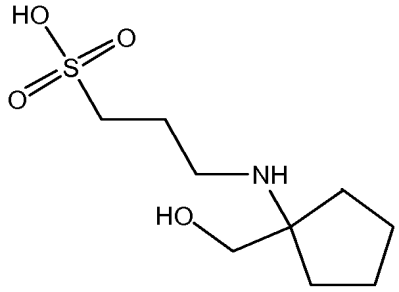

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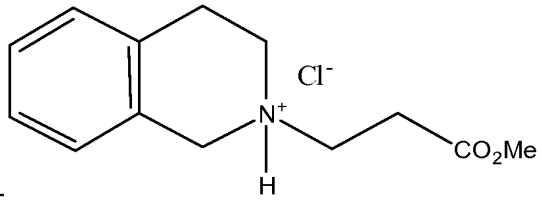


and pharmaceutically acceptable salts thereof;

A_{lnk} is a linker moiety; and A_{lab} is a labeling moiety.

32-42. (canceled)

43. (previously presented) A kit for preparing a radiopharmaceutical preparation, said kit comprising:

an amyloid-targeting imaging agent of claim 31;

a reducing agent;

a buffering agent;

a transchelating agent, and

instructions for the preparation and use of the radiopharmaceutical in the imaging of amyloid or an amyloid-related condition.

44-50. (canceled)

51. (withdrawn) A method of diagnostic medical imaging of an amyloid-associated disease comprising the steps of administering to a patient a pharmaceutical composition according to claim 31 and then imaging said patient.

52. (withdrawn) The method of diagnostic medical imaging according to claim 51 wherein A_{lab} of said pharmaceutical composition is a radiopharmaceutical.

53. (withdrawn) The method of diagnostic medical imaging according to claim 51 wherein A_{lab} of said pharmaceutical composition is a metal chelate.

54. (withdrawn) The method of diagnostic medical imaging according to claim 53 wherein said metal chelate is gadolinium-DTPA, gadolinium-DOTA, or gadolinium-DO3A.

55. (withdrawn) The method of diagnostic medical imaging according to claim 53 wherein said metal chelate is a chelate of ^{99m}Tc or ^{111}In.

56. (withdrawn) The method of diagnostic medical imaging according to claim 51 wherein said imaging step is ultrasound imaging.

57. (withdrawn) The method of claim 105, wherein said imaging step is radionuclide imaging.

58. (withdrawn) The method of claim 57, wherein said imaging step is SPECT imaging.

59. (withdrawn) The method of claim 105, wherein said imaging step is magnetic resonance imaging.

60. (withdrawn) The method of claim 105, wherein said imaging step is ultrasound imaging.

61. (withdrawn) The method of claim 105, wherein said imaging step is X-ray imaging.

62. (withdrawn) The method of claim 105, wherein said imaging step is fluorescence imaging.

63-94. (canceled)

95. (withdrawn) A method for diagnostic medical imaging of an amyloid-associated disease in a patient, comprising administering to a patient a pharmaceutical composition comprising an amyloid-targeting imaging agent of claim 31,
and imaging the amyloid-targeting imaging agent in said patient.

96. (withdrawn) The method of claim 95, wherein A_{lab} of said pharmaceutical composition is a radiopharmaceutical.

97. (withdrawn) The method of claim 95, wherein A_{lab} of said pharmaceutical composition is a metal chelate.

98. (withdrawn) The method of claim 95, wherein A_{lab} of said pharmaceutical composition is a metal chelate and said imaging step is magnetic resonance imaging or radionuclide imaging.

99. (withdrawn) The method of claim 97, wherein said metal chelate is gadolinium-DTPA, gadolinium-DOTA, or gadolinium-DO3A.

100. (withdrawn) The method of claim 97, wherein said metal chelate is a chelate of ^{99m}Tc or ^{111}In.

101. (withdrawn) The method of claim 95, wherein said imaging step is ultrasound imaging.

102. (canceled)

103. (withdrawn) A method for diagnosing an amyloid-related condition in a patient, comprising administering an amyloid-targeting imaging agent according to claim 31 to a patient, and imaging said amyloid-targeting imaging agent in said patient to determine the presence of amyloid in said patient, such that the presence or absence of an amyloid-related condition in said patient is determined.

104. (withdrawn) The method of claim 103, wherein said amyloid-related condition is selected from the group consisting of Creutzfeld-Jakob Disease (CJD), Kuru, transmissible cerebral ~~amyloidosis~~ amyloidosis, ~~(also known as~~ transmissible virus dementias[[)]], familial CJD, scrapie, transmissible mink encephalopathy, bovine spongiform encephalopathy (BSE), inflammation-associated amyloid, type II diabetes, primary amyloidosis, feline spongiform encephalopathy, non-transmissible cerebral amyloidosis ~~(e.g., Alzheimer's disease)~~, prion-mediated diseases, dialysis-related amyloidosis, light chain-related amyloidosis, cerebral amyloid angiopathy, and Alzheimer's disease.

105. (withdrawn) A method for imaging amyloid deposition in a patient, comprising administering an amyloid-targeting imaging agent according to claim 31 to a patient, and

imaging said amyloid-targeting imaging agent in said patient to determine the presence of amyloid in said patient.

106-131. (canceled)

132. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula

$$NaO_3SCH_2(CH_2)_4CH_2SO_3Na$$

or a pharmaceutically acceptable salt thereof.

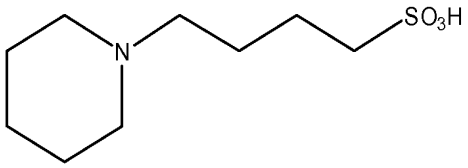
133. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula

~~NaO3SNHCH2CH2CH2OSO3Na~~

$NaO_3SNHCH_2CH_2CH_2OSO_3Na$

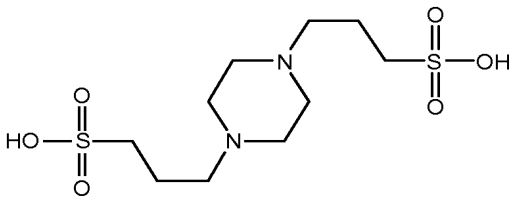
or a pharmaceutically acceptable salt thereof.

134. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



or a pharmaceutically acceptable salt thereof.

135. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



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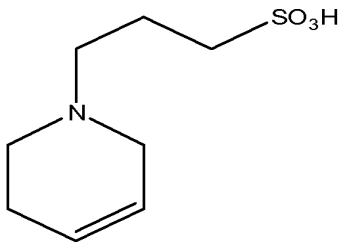
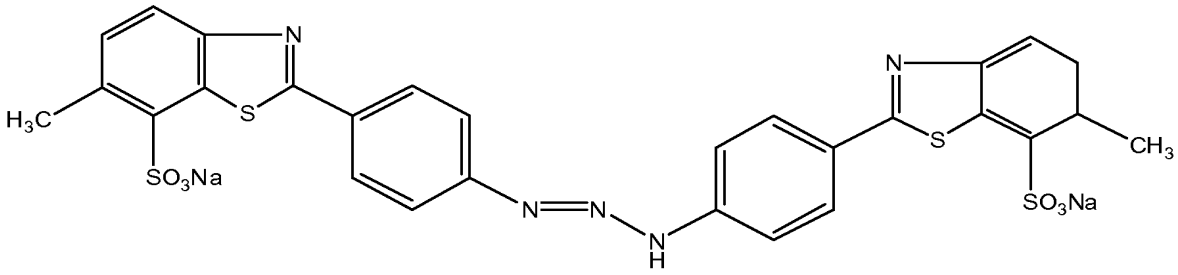
or a pharmaceutically acceptable salt thereof.

136. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



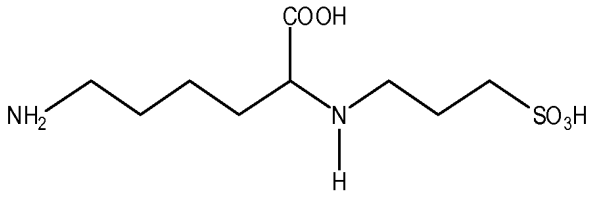
or a pharmaceutically acceptable salt thereof.

137. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



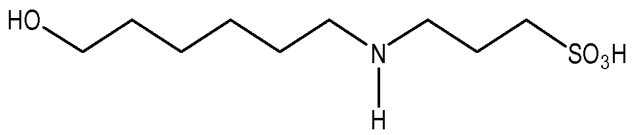
or a pharmaceutically acceptable salt thereof.

138. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



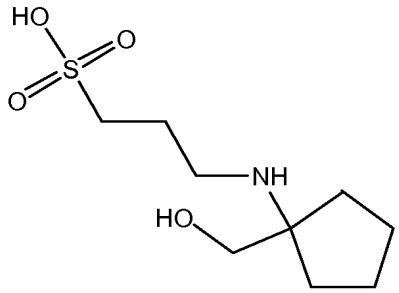
or a pharmaceutically acceptable salt thereof.

139. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



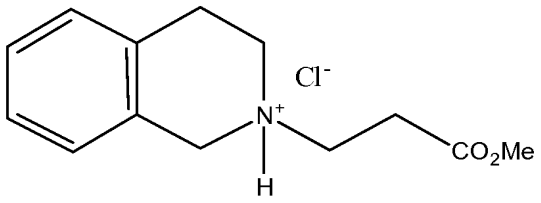
or a pharmaceutically acceptable salt thereof.

140. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



or a pharmaceutically acceptable salt thereof.

141. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



or a pharmaceutically acceptable salt thereof.